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GIBBONS P.C. ONE GATEWAY CENTER NEWARK, NJ 07102			EXAMINER LAI, MICHAEL C	
			ART UNIT 2457	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

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IPDocket@gibbonslaw.com

# Office Action Summary

**Application No.**

10/723,992

**Applicant(s)**

YANG ET AL.

**Examiner**

MICHAEL C. LAI

**Art Unit**

2457

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 4/29/2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-48 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-48 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

1. This office action is responsive to communication filed on 4/29/2010. Claims 2-48 have been examined.

***Response to Amendment***

2. The examiner has acknowledged the amended claims 2-4, 25, 26, and 29. Claim objection to claim 2 has been overcome and withdrawn accordingly. Claims 2-48 are pending.

***Response to Arguments***

3. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

***Claim Objections***

4. Claim 25 is objected to because of the following informalities: the claim status indicator should be "Currently Amended", not "Previously Presented".  
Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 2-24 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 2 recites the limitations "a power supply interface" in line 3 and "a power interface" in line 10. It is unclear whether they are the same or not.

Claim 2 recites the limitation "a power interface for connecting to said power supply interface" in lines 10-11. It is unclear whether the power interface is actually for connecting to the one or more remote power supplies or not.

Claim 2 recites the limitations "communication means for providing bi-directional communication **between said remote management unit and said workstation**; and wherein said remote management unit enables switching said communications to and from said computer workstation **between said KVM interface, said serial interface and said power interface**" in lines 12-16. It is unclear whether or not the limitation actually means the remote management unit enables the communications **between** the computer workstation **and any one of** the KVM interface, the serial interface and the power interface, and enables switching among the KVM interface, the serial interface and the power interface.

Claims 3-24 are necessarily rejected as being dependent upon the rejected claim 2.

***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 2-4, 8-15, 17, 20, 22-23, 25-29, 33-39, 41, 45-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over Comstock et al. (US 2004/0083266 A1, hereinafter Comstock), in view of Shirley (US 2002/0072892 A1, hereinafter

Shirley), and further in view of Wilder et al. (US 6,557,170 B1, hereinafter Wilder).

Regarding claim 2, Comstock discloses a remote management system for managing serial devices having a serial interface, remote servers having keyboard, video, and mouse ("KVM") interfaces [FIG. 1-2] comprising:

- a computer workstation including a keyboard, cursor control device and video display [para. 0023];

- at least one remote server including KVM interface [para. 0034];

- at least one remote serial device including a serial interface [para. 0030];

- a remote management unit coupled to said workstation and containing at least a KVM interface for connecting to said at least one remote server and a serial interface for directly connecting to said at least one remote serial device [FIG. 1, MCU 20];

- communication means for providing bi-directional communication between said remote management unit and said workstation [FIG. 1, gateway 30 and PSTN 60; para. 0020, 0021].

Comstock discloses the claimed invention except for the power supplies having a power supply interface and wherein said remote management unit enables switching said communication to and from said computer workstation between said KVM interface, said serial interface and said power interface.

Shirley discloses by using a KVM switch, a user may switch between computers

[see Fig. 2 and para. 0024]. Shirley further discloses incorporating a converter into a KVM switch directly. The converter acts as a terminal emulator and is connected to a communications port. By doing so, the communications port provides a serial interface. As a result, the KVM switch enables switching between the KVM interface and the serial interface [see Fig. 9 and para. 0024, 0034]. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to incorporate Shirley's teaching into Comstock's system for the purpose of eliminating extra mice, keyboards, and monitors by using a KVM switch which has capability of switching between the KVM interface and the serial interface, thereby providing cost and space saving in environments including server-farms and web-hosting facilities where space constraints are crucial.

Comstock and Shirley disclose substantially all the claimed invention except for the power supplies having a power supply interface and wherein said remote management unit enables switching said communication to said power interface. However, Wilder discloses a keyboard, video, mouse, and power switching ("KVMP") apparatus for connecting a plurality of computers to one or more user stations having an attached keyboard, video monitor, and mouse. On screen display ("OSD") circuitry embedded within the KVMP switching apparatus allows a user located at a user station to select and operate any one of the computers utilizing the keyboard, video monitor, and mouse attached to the user station. Secondary switching circuitry located within the KVMP switching apparatus

allows a user located at a user station to additionally control the electrical power supply supplying each computer [see at least abstract and col. 3, lines 21-28]. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to incorporate Wilder's teaching into Comstock's and Shirley's system for the purpose of eliminating extra wires by using a KVM switch which has capability of switching between the KVM interface, the serial interface and the power interface, thereby providing a KVM switch having integrated power switching functions and control [see at least col. 3, lines 21-28].

Regarding claim 3, Comstock-Shirley-Wilder further disclose wherein said workstation controls the power supply coupled to at least one of said at least one remote device or one of said at least one remote serial device through said power interface of said remote management unit [Comstock: para. 0020, 0021; Wilder: col. 3, lines 21-28]. See motivation above

Regarding claim 4, Comstock further discloses wherein access to said remote management unit by said workstation is controlled by unique user passwords or authentication information and wherein said remote management unit stores profile information for an authorized user comprising a list of said remote devices and said remote serial devices accessible to said authorized user [para. 0027].

Regarding claim 8, Comstock further discloses wherein said remote management unit includes at least one header circuit for selective

communication between at least one KVM port of said remote management unit and at least one video port of said at least one remote server [para. 0020, 0021].

Regarding claim 9, Comstock further discloses wherein said header circuit includes a video switch, and at least one receiver transmitter circuit, wherein said receiver transmitter circuit converts parallel and serial signals [para. 0030-0032, 0034-0035].

Regarding claim 10, Comstock further discloses wherein said remote management unit includes at least one frame grabber circuit for digitizing video signals [para. 0030, 0035].

Regarding claim 11, Comstock further discloses wherein said framer grabber circuit converts analog video signals to digital video signals [para. 0030-0032, 0035-0036].

Regarding claim 12, Comstock further discloses wherein said remote management unit includes a frame grabber circuit for correcting an image produced by said video signals [para. 0065-0067].

Regarding claim 13, Comstock further discloses wherein said remote management unit includes at least one local KVM port [para. 0020, 0021].

Regarding claim 14, Comstock further discloses wherein said remote management unit includes at least one video processor circuit for compressing video signals [para. 0038, 0065].



Regarding claim 15, Comstock further discloses wherein said video processor circuit includes at least one video receiving circuit for receiving video signals from at least one CPU [para. 0030-0032, 0035-0036].

Regarding claim 17, Comstock further discloses wherein said video processor circuit includes at least one frame buffer circuit for storing video frames indicative of said video signals [para. 0065, 0066].

Regarding claim 20, Comstock further discloses wherein said video processor circuit includes at least one memory circuit coupled to said microprocessor for storing data [para. 0065, 0066].

Regarding claim 22, Comstock further discloses wherein said remote management unit includes at least one modem module for demodulating signals received by a modem [para. 0038].

Regarding claim 23, Comstock further discloses wherein said communication means is selected from the group consisting of a LAN, a WAN, a wireless connection, a modem, a direct modem connection, and the Internet [para. 0020, 0021].

Regarding claim 25, Comstock discloses an apparatus [FIG. 1, MCU 20] for coupling a workstation to one or more remote servers and one or more remote serial devices, said apparatus comprising:

a communication circuit for transmitting signals to and receiving signals from said workstation via a communication medium [FIG. 1, gateway 30 and PSTN 60; para. 0020, 0021];

a serial communication circuit for transmitting serial data to and receiving serial data signals from one or more of said remote serial devices [FIG. 1, MCU 20 and Network 80; para. 0020, 0021];

a keyboard, video, mouse (KVM) circuit for transmitting and receiving KVM signals from one or more of said remote servers [para. 0034]; and

a central processing circuit [para. 0022].

Comstock discloses the central processing circuit but fails to disclose specifically the remote power supplies, the power circuit, and that the central processing circuit is for controlling transmission of said signals between at least one said communication circuit, said serial communication circuit and said KVM circuit. Shirley discloses by using a KVM switch, a user may switch between computers [see Fig. 2 and para. 0024]. Shirley further discloses incorporating a converter into a KVM switch directly. The converter acts as a terminal emulator and is connected to a communications port. By doing so, the communications port provides a serial interface. As a result, the KVM switch enables switching between the KVM interface and the serial interface [see Fig. 9 and para. 0024, 0034]. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to incorporate Shirley's teaching into Comstock's apparatus for the purpose of eliminating extra mice, keyboards, and monitors by using a KVM switch which has capability of controlling transmission of signals between at least one communication circuit, a serial communication circuit and a

KVM circuit, thereby providing cost and space saving in environments including server-farms and web-hosting facilities where space constraints are crucial.

Comstock and Shirley disclose substantially all the claimed invention except for the remote power supplies and the power circuit. However, Wilder discloses a keyboard, video, mouse, and power switching ("KVMP") apparatus for connecting a plurality of computers to one or more user stations having an attached keyboard, video monitor, and mouse. On screen display ("OSD") circuitry embedded within the KVMP switching apparatus allows a user located at a user station to select and operate any one of the computers utilizing the keyboard, video monitor, and mouse attached to the user station. Secondary switching circuitry located within the KVMP switching apparatus allows a user located at a user station to additionally control the electrical power supply supplying each computer [see at least abstract and col. 3, lines 21-28]. It would have been obvious to a person with ordinary skill in the art at the time the invention was made to incorporate Wilder's teaching into Comstock's and Shirley's system for the purpose of eliminating extra wires by using a KVM switch which has remote power supplies and power circuits, thereby providing a KVM switch having integrated power switching functions and control [see at least col. 3, lines 21-28].

Regarding claim 26, Comstock further discloses wherein said one or more remote servers and said one or more remote serial devices are powered by power sources [para. 0020, 0022].

Regarding claim 27, Comstock further discloses wherein said apparatus is connected to said power sources for said one or more remote server and one or more remote serial device [para. 0020, 0022].

Regarding claim 28, Comstock further discloses wherein said workstation controls said one or more remote server and one or more remote serial device power sources through said apparatus [para. 0020, 0021].

Regarding claim 29, Comstock further discloses wherein access to said apparatus by said workstation is controlled by unique user passwords or authentication information and wherein said apparatus stores profile information for an authorized user comprising a list of said remote devices and said remote serial devices accessible to said authorized user [para. 0027].

Regarding claim 33, Comstock further discloses wherein said apparatus includes at least one header circuit for selective communication between at least one KVM port and at least one video port of said remote servers [para. 0020, 0021].

Regarding claim 34, Comstock further discloses wherein said header circuit includes a video switch, and at least one receiver transmitter circuit, wherein said receiver transmitter circuit converts parallel and serial signals [para. 0030-0032, 0034-0035].

Regarding claim 35, Comstock further discloses wherein said apparatus includes at least one frame grabber circuit for digitizing and correcting images produced by video signals [para. 0030, 0035].

Regarding claim 36, Comstock further discloses wherein said frame grabber circuit converts analog video signals to digital video signals [para. 0030-0032, 0035-0036].

Regarding claim 37, Comstock further discloses wherein said apparatus includes at least one local KVM port [para. 0020, 0021].

Regarding claim 38, Comstock further discloses wherein said apparatus includes at least one video processor circuit for compressing video signals [para. 0038, 0065].

Regarding claim 39, Comstock further discloses wherein said video processor circuit includes at least one circuit to receive video signals from said central processing circuit [para. 0030-0032, 0035-0036].

Regarding claim 41, Comstock further discloses wherein said video processor circuit includes at least one frame buffer circuit for storing video frames indicative of said video signals [para. 0065, 0066].

Regarding claim 45, Comstock further discloses wherein said apparatus includes at least one modem module for demodulating signals received by modem [para. 0038].

Regarding claim 46, Comstock further discloses wherein said communication medium is at least one selected from the group consisting of a LAN, a WAN, a

wireless connection, a modem, a direct modem connection, and the Internet [para. 0020, 0021].

Regarding claim 47, Comstock further discloses wherein said signals transmitted and received by said workstation are at least one control signal selected from the group consisting of keyboard, video, mouse, serial or power [para. 0020, 0022].

9. Claims 5 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Comstock, Shirley, and Wilder as applied to claim 2, and further in view of Watkins (US 2002/0198978 A1, hereinafter Watkins).

Regarding claims 5 and 30, Comstock, Shirley, and Wilder fail to specifically disclose redundant power supply. However, Watkins teaches a back-up redundant power supply [para. 0033]. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate Watkins' teaching into Comstock's, Shirley's, and Wilder's system for the purpose of preventing total power loss by using a redundant power supply, thereby providing a reliable power supply system.

10. Claims 6-7 and 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Comstock, Shirley, and Wilder as applied to claim 2, and in view of DeAnna et al. (US 2003/0084056 A1, hereinafter DeAnna).

Regarding claims 6 and 7, Comstock, Shirley, and Wilder fail to disclose the option menu circuit including identification of said at least one remote device. However, DeAnna teaches in a remote management system uses a convenient

menu to change a server device [para. 0047]. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate DeAnna' teaching into Comstock's, Shirley's, and Wilder's system for the purpose of providing a menu driven environment by using an option menu including identification of remote device, thereby providing a more user friendly system.

Regarding claims 31 and 32, Comstock, Shirley, and Wilder fail to disclose the option menu circuit including identification of said at least one remote device. However, DeAnna teaches in a remote management system uses a convenient menu to change a server device [para. 0047]. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate DeAnna' teaching into Comstock's, Shirley's, and Wilder's system for the purpose of providing a menu driven environment by using an option menu including identification of remote device, thereby providing a more user friendly system.

11. Claims 16, 18-19, 21, 40, 42-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Comstock, Shirley, and Wilder as applied to claim 2, and further in view of Coleman (US 2004/0042547 A1, hereinafter Coleman).

Regarding claims 16 and 40, Comstock, Shirley, and Wilder teach substantially all the limitation in claim 14, but fails to disclose wherein said video processor circuit includes at least one pixel pusher circuit for storing red, green and blue video signal components of said video signals. However, Coleman

teaches using a pixel pusher 221 to store A/D converter 201 outputs pixels representing the red component, green component and blue component of the digitized signal [FIG. 2 and para. 0118]. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate Coleman' teaching into Comstock's, Shirley's, and Wilder's system for the purpose of storing red, green and blue video signal components of video signals by using a pixel pusher, thereby providing a system of effectively digitizing and compressing the video output of a computer such that it may be monitored and controlled from a remote location.

Regarding claims 18 and 42, Comstock, Shirley, and Wilder teach substantially all the limitation in claim 14, but fails to disclose using Joint Bi-level Image experts Group (JBIG) compression for video processor circuit compresses video signals. However, Coleman teaches using the JBIG lossless compression technique for compressing video data [para. 0075]. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate Coleman' teaching into Comstock's, Shirley's, and Wilder's system for the purpose of saving network bandwidth by using a lossless compression algorithm such as JBIG, thereby providing a system of effectively digitizing and compressing the video output of a computer such that it may be monitored and controlled from a remote location.

Regarding claims 19 and 43, Comstock, Shirley, and Wilder teach substantially all the limitation in claim 15, but fails to disclose wherein said video



processor circuit includes at least one microprocessor for controlling at least one of a frame buffer circuit, pixel pusher circuit and JBIG compression. However, Coleman teaches using a microprocessor for controlling the frame buffer, pixel pusher and JBIG [FIG. 2 and para. 0118]. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate Coleman' teaching into Comstock's, Shirley's, and Wilder's system for the purpose of controlling video digitization/compression by using a microprocessor, thereby providing a system of effectively digitizing and compressing the video output of a computer such that it may be monitored and controlled from a remote location.

Regarding claims 21, Comstock, Shirley, and Wilder teach substantially all the limitation in claim 14, but fail to disclose wherein said video processor circuit includes at least one switch for outputting video signals. However, Coleman teaches compression and digitization of computer video through a video switch [para. 0021]. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate Coleman' teaching into Comstock's, Shirley's, and Wilder's system for the purpose of allowing the transfer of video data over extended distances at increased speed of transfer by using a video switch, thereby providing a better remote monitoring/management system [para. 0021].

Regarding claims 44, Comstock, Shirley, and Wilder teach substantially all the limitation in claim 38, but fail to disclose wherein said video processor circuit

includes at least one switch for outputting signals to an Ethernet port or a modem port. However, Coleman teaches compression and digitization of computer video through a video switch [para. 0021]. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate Coleman's teaching into Comstock's, Shirley's, and Wilder's apparatus for the purpose of allowing the transfer of video data over extended distances at increased speed of transfer by using a video switch, thereby providing a better remote monitoring/management system [para. 0021].

12. Claims 24 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Comstock, Shirley, and Wilder as applied to claim 2, and in further view of Kim et al. (US 2003/0055922 A1, hereinafter Kim).

Regarding claim 24, Comstock, Shirley, and Wilder teach substantially all the limitation in claim 2, but fails to disclose wherein said remote management unit includes reset circuitry controllable by said workstation for resetting said remote management unit. However, Kim teaches a reset circuitry provided for resetting previously generated identifier values stored in the special function register [para. 0050]. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate Kim's teaching into Comstock's, Shirley's, and Wilder's system for the purpose of controlling the remote management unit via a reset circuit, thereby providing a better remote controlling/management system.

Regarding claim 48, Comstock, Shirley, and Wilder teach substantially all the limitation in claim 25, but fail to disclose wherein said apparatus includes a reset circuit for resetting said apparatus. However, Kim teaches a reset circuitry provided for resetting previously generated identifier values stored in the special function register [para. 0050]. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to incorporate Kim's teaching into Comstock's, Shirley's, and Wilder's apparatus for the purpose of controlling the remote management unit via a reset circuit, thereby providing a better remote controlling/management system.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will

the statutory period for reply expire later than SIX MONTHS from the date of this final action.

In the case of amending the claimed invention, Applicant is respectfully requested to indicate the portion(s) of the specification which dictate(s) the structure relied on for proper interpretation and also to verify and ascertain the metes and bounds of the claimed invention.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL C. LAI whose telephone number is (571)270-3236. The examiner can normally be reached on M-F 8:30 - 5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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15JUL2010

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